

Improving Decision Support for the Warfighter

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Decision Support Tools for JFACC

<h2><u>Description / Background</u></h2>	<h2><u>Focus / Status</u></h2>
<ul style="list-style-type: none"> • Warfighters need the right tools to train, plan, fight, and win • NIMBLE LION reinforced usefulness of decision support for crisis action planning (CAP) / operational rehearsal <ul style="list-style-type: none"> – Proved need for M&S improvement 	<ul style="list-style-type: none"> • EFX 99 objectives include more realism in CAP and early force movement • Coordinate proposed EFX99 initiative with C2TIC, C2 Battle Lab, ESC/DIS by EFX Initial Experimentation Conference, 17-19 November
<h2><u>Actions / Issues</u></h2>	<h2><u>Recommendations</u></h2>
<ul style="list-style-type: none"> • There is no quantitative method for evaluating alternative COAs or ATOs <ul style="list-style-type: none"> – M&S can satisfy the need • TBMCS development does not address CAP near-term; JFACC Planning Tool also has need for new simulation engine • Air Expeditionary Force taskings and information saturation will increase need for CAP response / fidelity 	<ul style="list-style-type: none"> • Support EFX 99 initiative to include M&S tools for CAP and rehearsal • Look for off-the-shelf simulations and visualization systems • Use active, updated C2 databases to populate simulation data • Refine requirements through EFX 99 and into EFX 2000

Overview

**Goal: Meet Near-Term
Decision Support Needs of Warfighter**

- **Operational Needs**
- **Evolving Aerospace Force**
- **Roadmap to Satisfy Needs**

CAP Phases: Operational Needs

Situation Development: Evaluate possible scenarios

- Update C2 and simulation database; look at options

Crisis Development: Look at force structure and beddown

- Planned at right level and in the right locations?

COA Development: Recommend forces, locations, course to JFC

- COA analysis through air art and computation

COA Selection: JFACC develops Joint Air Ops Plan

- Air strategy and Centers of Gravity analyzed in terms of history and operational environment research

Execution Planning: JFACC develops ATO 1, 2, 3...

- Achieve JFC's goals by orchestrating desired effects
- Gain spacial / temporal advantage to control or defeat enemy's strategy

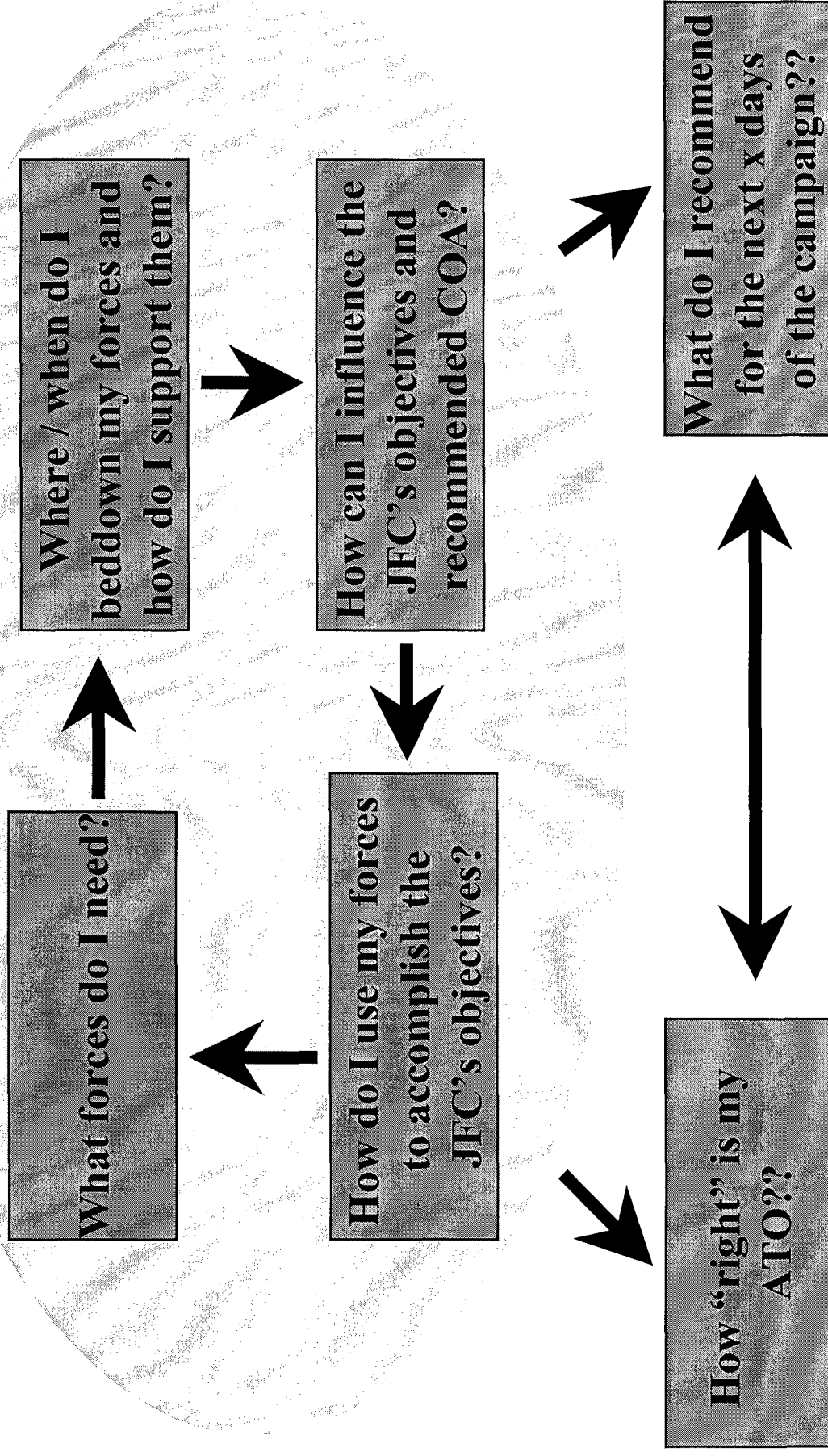
Execution - new ATOs; new branches and sequels

- Change the plan to attain NCA / JFC objectives

M&S can clearly assist in creating a decision support environment!

Operational Needs

CAP



Find the answers through air art, analysis, simulation, unforgiveness of war.

Operational Needs

- Hypothesis: The Air Boss needs tools to
 - Provide distributed, integrated training of warfighters: C2, flight missions, support forces
 - Readiness for planned or pop-up / crisis tasking
 - ***Support Crisis Action Planning****
 - ***Course of Action and beddown / support analyses****
 - ***Rehearse operations through simulation****
 - ***Covert rehearsal of pop-up / crisis operations****
 - ***Analysis of operational branches and sequels****
 - ***Test-fly the Air Tasking Order (ATO)****
 - Maintain force readiness when deployed
- *areas in need of decision support improvements***

MS&A can clearly assist in creating a decision support environment!

Evolving to an EAF

- Commanders' NOTAM 98-4 on EAF:
 - “...emphasizes *more rapid and effective operations**, with forces trained to task.”
 - “...*geographically separated, but operationally-linked units** to provide support to ongoing operations and *rapid response to crises**.”
 - “By January 2000...Successful implementation ...will require innovative ideas...”

****areas in need of decision support improvements***

MS&A can clearly assist in creating a decision support environment!

Roadmap

- **Verify JFACC need for the best decision support tools that can be supported by M&S**
 - **Site visit to C2TIC and C2 Battle Lab (C2BL)**
 - **20 - 23 October 98**
 - **Brief ESC/DIS and C2BL M&S Symposium**
 - **4 - 5 November 98**
- **Propose initiative at EFX Initial Experiment Conference (15 - 19 November 98)**

Roadmap

- **Plan EFX initiative that includes simulations and reachback analysis support**
 - Look for promising off-the-shelf, fielded tools
 - Highlight successful data management techniques and visualization systems critical to rehearsal
 - Look at forward support concept or reachback for M&S and analysis support
- **Brief AFMSAWG in late FY 99 on progress, findings, and proposed FY00 planning**

Summary

- Overall Operational Needs
- Expeditionary Aerospace Force (EAF)
- Roadmap to Satisfy Needs

Provide NAF and AEF Commanders and the JFACC access to the right Decision Support tools and analysis at the right time.

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